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# USER MANUAL

**MODEL NUMBER:**  
**IVX-LITE Controller Series**

**Inventory Logix**

**English (Original Instructions)**

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## READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

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## READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT



### WARNING

#### Avoid Personal Injury



1. Avoid contact of cleaning agent with skin and eyes. If contact occurs, see MSDS sheet for further first aid measures.



2. Follow safety instructions of chemical manufacturer (MSDS).



3. Always follow plant and OSHA guidelines about the use of hygiene equipment.
4. Disconnect power before servicing unit.

#### Specifications

Width.....11.5"

Depth.....5"

Height.....9.5"

#### Electrical Connection Requirements

115 Volts AC

Single Phase

60 Hz

2 Amps

24 VDC - Control Voltage (Unit has internal power supply)

## READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

### Installation Instructions

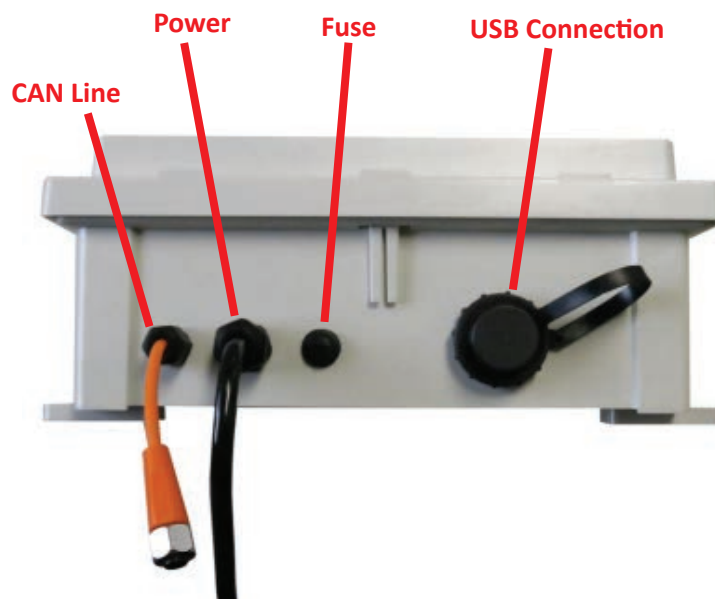
#### Control Box

Aspects to consider when deciding on placement:

- Distance to electrical connection.
- Distance to Ethernet or WiFi connections (depending on model).
- Room for entering and exiting.
- Emergency exit paths.

Attach the included mounting feet to the control box with a phillips screwdriver. Securely mount control box to wall, then plug into 115 volt wall outlet.

If the unit was purchased with an Ethernet connection, plug it into the plant network. (See page 16 to setup the unit on an Ethernet network).



## READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

### Setup Instructions

#### Admin Settings

To edit settings on the IVX-LITE, log into the Admin screen by pressing the “Admin” button and typing in the 4-digit administrator passcode. The default Admin user will be setup with the code “1234.” This code can be changed under the “Users” section. (See Page 6).

The Admin screen will automatically return to the home screen after 1 minute of inactivity for security purposes.

To edit a setting select its option from this menu:

- **Users:** Create and edit users.
- **Sensors:** Edit sensors, set calibration points, set alarms, and check the status of the sensor.
- **Unit Info/Config:** Edit the unit name, language, units of measurement, and view the unit’s serial number and build date.
- **Time Set/Config:** Set the date, time, and time zone on the unit.
- **USB Options:** Safely remove USB, update firmware, and import/export configuration files to a USB flash drive.
- **Network Setup:** Setup the unit on a WiFi or Ethernet network so it can send out Inventory Reports via email.
- **Reporting:** View the reporting status, and change the timing and recipients of the Inventory Reports.

**NOTE:** If at any point you need to go back, press ESC

Admin Login  
Enter Passcode:  
XXXX

IVX-LITE Admin Menu  
1-Users  
2-Sensors  
3-Unit Info/Config

IVX-LITE Admin Menu  
4-Time Set/Config  
5-USB Options  
6-Network Setup

IVX-LITE Admin Menu  
5-USB Options  
6-Network Setup  
7-Reporting

## READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

### User Settings

To create new, and edit existing users, log into the Admin screen by pressing the “Admin” button and typing in the 4-digit administrator passcode.

Press “1” or use the navigational keys to select the “Users” option and press ENTER.

This will bring up a list of users currently setup on the unit. Use the navigational keys to scroll through the list.

To edit current users, use the navigational keys to select them from the list, then press ENTER.

To create a new user, select “Add New User” and press ENTER.

Using the keypad, type in the user’s name and their 4-digit passcode they will use to login.

Once finished, press ESC to go to the confirmation page. From here, press ENTER to save the user, or ESC to ignore.

**NOTE:** A 4-digit code can only be assigned to one user. Users cannot share codes. If the code being assigned to the user is “0000” or a code that is already assigned to another user, the screen will say “Supplied Password is Invalid. Please Correct and Try Again.”

The new user will now appear in the list of users.

### Edit Users

00– Add New User

01– Administrator

### Editing User #02

Name: Plant User

Password: 0000

### Editing User #02

(SAVE Entry)

ENTER to save

ESC to ignore

### Edit Users

00– Add New User

01– Administrator

02– Plant User

## READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

### Sensors

To edit Sensors, log into the Admin screen by pressing the “Admin” button and typing in the 4-digit administrator passcode.

Press “2” or use the navigational keys to select “Sensors” and press ENTER.

To edit a sensor, use the navigational keys to select it and press ENTER.

Use the keypad and navigational keys to edit the sensor name, ID, and enter the size container it is in.

To set the calibration points select “Set Cal Point #1”, and press ENTER.

**NOTE:** Calibrations should be done prior to initial use.

Use the keypad to enter in the number of liters currently in the container.

When finished press ESC. You will be prompted to a confirmation screen, press ENTER.

Repeat the same steps for setting calibration point 2.

```
Select Sensor
100-Chemical 1
200-Chemical 2
```

```
Edit Sensor      #100
Name: Chemical 1
ExtID:
Size:  0000080 GAL
```

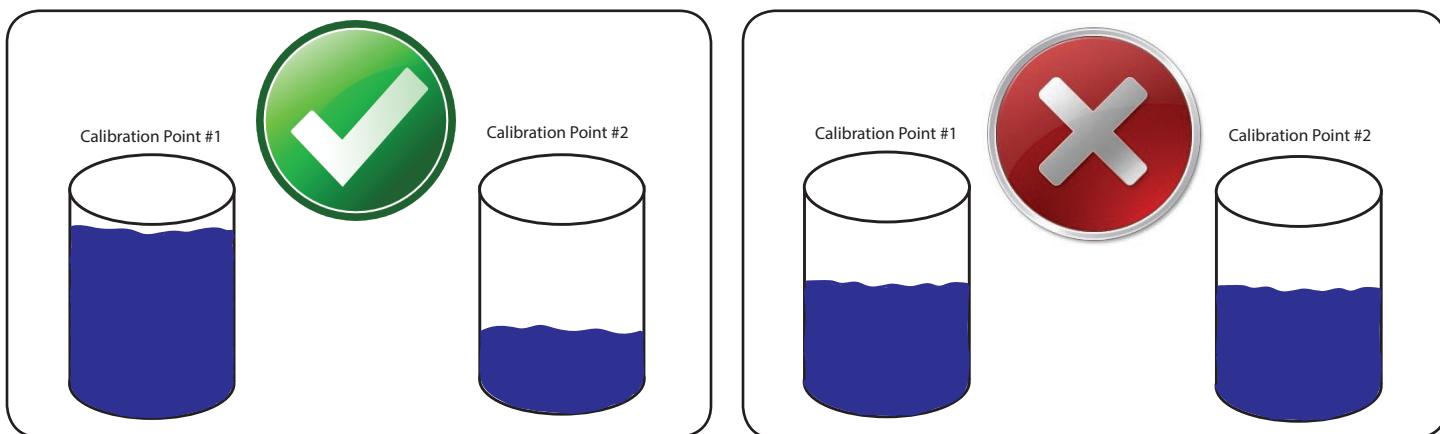
```
Set Cal Point #1
Set Cal Point #2
Alarm Setup
Sensor Status
```

```
Set Cal Point #1
Sensor Status
000303 Liters
```

## READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

### Sensors (Continued)

When setting the calibrations be sure to use two different levels for calibration point 1 and calibration point 2. For example, an 80% full container for calibration point 1 and a 20% full container for calibration point 2 would be ideal. While, a 50% full container for both calibration points would be unreliable. See the diagram below.



### Alarms

This unit also has alarm features. The alarms can be set to send email alerts based on your volume specifications.

For example, if you typically order more chemical when your drum has about 5 liters left, you can program 5 liters as a “Low set”. Then the unit will send you an alarm through your email when your drum has reached this level.

Another example, for the “High Set” you may want to set the volume level the drum is supposed to be filled to. This will send you an email alarm when the drum reaches this level. Thus, you could ensure your chemical shipment arrived without making a trip to the chemical room.

The “Alarm Setup” option allows you to:

- Set high and low points where you would like the sensor to alarm you
- How often you want the alarm repeated
- Set the delay in response to volume changes

Set Cal Point #1  
Set Cal Point #2  
Alarm Setup  
Sensor Status

High Set	400	L
Low Set	10	L
Repeat Rate	1	hr
Hysteresis	2.0%	



## READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

### Sensors (Continued)

The high and low points (in liters) can be entered using the keypad.

Next you will see “Repeat Rate”. This is a time setting for how often you want the email alarm to be repeated while the volume remains at the high or low set point.

To change “Repeat Rate” press → or ←.

Hysteresis is the setting for the delay. This allows you to set a delay in response to volume changes. The unit will only send the alarm if the volume has reached the high or low set point, the specified delay time has been reached, and the volume still remains at the set point or more extreme.

To change “Hysteresis” press → or ←.

Once finished, press ESC to return to the “Edit Sensor” menu. Any changes will be automatically saved.

To view the status of the sensor select “Sensor Status” and press ENTER.

The sensor status displays:

- The sensor number
- A live reading from the sensor
- The two set calibration points

Press ESC to return to the “Sensor” menu.

Press ESC again to return to the “Admin” menu.

### Alarm Settings

High Set	400	L
Low Set	10	L
Repeat Rate	1	hr

High Set	400	L
Low Set	10	L
Repeat Rate	1	hr
Hysteresis	2.0%	

Set Cal Point #1  
Set Cal Point #2  
Alarm Setup  
Sensor Status

		#100
Live	0.0L	17080uA
Cal1	0L	4000uA
Cal2	0L	4000uA

## READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

### Unit Info/Config

To edit Unit Config Settings, log into the Admin screen by pressing the “Admin” button and typing in the 4-digit administrator passcode.

Press “3” or use the navigational keys to select “Unit Info/Config” and press ENTER.

From here the unit’s basic config settings can be changed. To change an option, use the navigational keys to select it, then press ENTER, → or ← to switch settings.

To enter or change a units name, press → and begin entering the name.

Press ENTER, → or ← over the “Event Logging” option to switch between “Yes” and “No”.

**NOTE:** To assign cards to users, “RFID” must be enabled.

Press ENTER, → or ← over the “RFID enabled” option to switch between “Yes” and “No”.

**NOTE:** “Advance rate” not utilized with this version.

Press ENTER, → or ← over the “Units” option to switch between Imperial and Metric units of measurement.

Press ENTER, → or ← over the “Language” option to switch between English and Spanish text.

The “Version #” shows what software version this unit currently has, and the bottom of the page shows when this unit was built.

### Unit Config/Info

Unit Name: Test Unit

Event Logging: Yes

RFID enabled: Yes

Advance rate: 10s

Units: Metric

Language: English

Version #: 009

Language: English

Version #: 009

Serial #: 000001

Built on: 6/10/15

Once finished, press ESC to return to the main Admin menu. Any changes will be automatically saved.

## READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

### Time Set/Config

To change the date or time on the unit, log into the Admin screen by pressing the “Admin” button and typing in the 4-digit administrator passcode.

Press “4” or use the navigational keys to select “Time Set/Config” and press ENTER. The “Time Config Menu” with three options will appear.

Time Config Menu  
Status  
Time Zone Setup  
Manual Time Set

Press ENTER over the “Status” option to view:

- Date
- Time
- Whether or not daylight savings time is enabled
- Time zone
- If time synced is on or off

06/10/15 03:00:20PM  
DST: Enabled  
TZ: -5 Actual: -5  
Time Synced: YES

Press ESC when you are done viewing.

Press ENTER over the “Time Zone Setup” option to make changes to:

- Time zone
- Enable daylight savings time
- Set the start and stop month, day, and hour for daylight savings time

Time Zone Config  
Zone Offset: -5  
DST Enabled: YES  
DST Start Month: 3

To change any of these options use the navigational keys to select it, then press → or ← to increase, decrease, or switch the option.

Once finished, press ESC to return to the “Time Set/Config” menu. Any changes will be automatically saved.

DST Start Day: 8  
DST Start Hour: 2  
DST Stop Month: 11  
DST Stop Day: 1

## READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

### Time Set/Config (Continued)

To change the date and time select the “Manual Time Set” option.

Use the navigational keys and the keypad to input the correct values for the date and time. To change from AM to PM scroll until the AM on the screen appears as “>AM<” press ENTER to switch to PM. Use the same method to switch from PM to AM.

Once finished, press ESC to return to the main Admin menu. Any changes will be automatically saved.

Time Config Menu  
Status  
Time Zone Setup  
Manual Time Set

Date  
M:06 D:10 Y:2015  
Time  
H:03 M:00 PM

## READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

### USB Options

To access USB Options on the unit, log into the Admin screen by pressing the “Admin” button and typing in the 4-digit administrator passcode.

Press “5” or use the navigational keys to select “USB Options” and press ENTER.

Press ENTER over any of the following options to select it.

- Remove USB disk
- Update Firmware
- Export Config
- Import Config

The IVX-LITE unit will come with a small USB flash drive already plugged into the USB port on the bottom for your convenience, although any standard USB flash drive can also be used.

Once any export process is complete, the unit will display “Export Complete,” and whatever was exported to the flash drive will appear when it is plugged into a computer.

### USB Options

- 1-Remove USB disk
- 2-Update Firmware
- 3-Export Config

### USB Options

- 2-Update Firmware
- 3-Export Config
- 4-Import Config



## READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

### Network Setup

To edit Network settings on the unit, log into the Admin screen by pressing the “Admin” button and typing in the 4-digit administrator passcode.

Press “6” or use the navigational keys to select “Network Setup” and press ENTER.

From here the unit’s network settings can be changed. To change an option, use the navigational keys to select it, then press ENTER to switch settings.

Press ENTER → or ← over the “Type” option to specify if the unit will connect to the network via WiFi, Ethernet, or not at all.

Press ENTER → or ← over the “Address” option to specify a DHCP address, or a manual IP address.

### Setup on a WiFi Network w/ DHCP

Set the “Type” to “WiFi” and set the address to “DHCP.”

Press ENTER over the “WiFi Config” option to setup the unit on the wireless network. From here, use the keypad to type in the SSID (name of the network).

Press → or ← over the “Security type” to select between WEP, WPA, WPA2 or no encryption options.

Press ↓ to scroll down, then use the keypad to type in the password to the wireless network.

### Network Setup

Type: WiFi

Address: DHCP

WiFi Config

### Network Setup

WiFi Config

TCP/IP Config

Connection Status

### WiFi Config

SSID

(demo network)

Security Type: WPA2

### WiFi Config

Security Type: WPA2

Security Key

(demo password)

## READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

### Setup on a WiFi Network w/ DHCP (Continued)

Once finished, press ESC to return to the Network Setup menu. Press ESC again and the unit will say "Initializing" and will return to the main menu. Any changes will be automatically saved.

To see if the unit is connected to the network, log back into the Network setup page and press ENTER over "Connection Status."

The unit will either say "Connected," "Pending," or "Disconnected."

### Setup on a WiFi Network w/ Manual IP Info

Set the "Type" to "WiFi" and set the address to "Manual."

Press ENTER over the "TCP/IP" option to manually setup the unit on the WiFi Network.

Use the keypad to type in the IP address, the Subnet, the Gateway, and the DNS.

Once finished, press ESC to return to the Network Setup menu. Press ESC again and the unit will say "Initializing" and will return to the main menu. Any changes will be automatically saved.

To see if the unit is connected to the network, log back into the Network setup page and press ENTER over "Connection Status."

The unit will either say "Connected," "Pending," or "Disconnected."

Status: Connected  
IP: 192.168.002.057  
SUB: 255.255.255.000  
GW: 192.168.002.001

Status: Pending  
IP: 255.255.255.255  
SUB: 255.255.255.255  
GW: 255.255.255.255

Network Setup  
Type: WiFi  
Address: Manual  
WiFi Config

TCP/IP Config  
IP: 000.000.000.000  
SUB: 000.000.000.000  
GW: 000.000.000.000

## READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

### Setup on an Ethernet Network w/ DHCP

Make sure the unit is plugged into the Ethernet network.

Set the "Type" to "Ethernet" and set the address to "DHCP."

Once finished, press ESC to return to the Network Setup menu. Press ESC again and the unit will say "Initializing" and will return to the main menu. Any changes will be automatically saved.

To see if the unit is connected to the network, log back into the Network setup page and press ENTER over "Connection Status."

The unit will either say "Connected," "Pending," or "Disconnected."

### Setup on an Ethernet Network w/ Manual IP Info

Set the "Type" to "Ethernet" and set the address to "Manual."

Press ENTER over the "TCP/IP" option to manually setup the unit on the Ethernet Network.

Use the keypad to type in the IP address, the Subnet, the Gateway, and the DNS.

Once finished, press ESC to return to the Network Setup menu. Press ESC again and the unit will say "Initializing" and will return to the main menu. Any changes will be automatically saved.

To see if the unit is connected to the network, log back into the Network setup page and press ENTER over "Connection Status."

The unit will either say "Connected," "Pending," or "Disconnected."

### Network Setup

Type: Ethernet

Address: DHCP

WiFi Config

Status: Connected

IP: 192.168.002.057

SUB: 255.255.255.000

GW: 192.168.002.001

### Network Setup

Type: Ethernet

Address: Manual

WiFi Config

### TCP/IP Config

IP: 000.000.000.000

SUB: 000.000.000.000

GW: 000.000.000.000



## READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

### Reporting

To edit Reporting settings on the unit, log into the Admin screen by pressing the “Admin” button and typing in the 4-digit administrator passcode.

Press “7” or use the navigational keys to select “Reporting” and press ENTER. From here the reporting config, status, and addresses can be changed and a report can be sent on demand.

Press ENTER over “Reporting Config” to set:

- Rate in which samples are taken
- Rate in which reports are sent
- Web reporting on or off

Press ESC to return to the Reporting menu when finished. Any changes made will be saved automatically.

Press ENTER over “Reporting Status” to see when the next Inventory Report will be emailed, when the last Inventory Report was emailed, and whether the unit is connected to the plant network or not.

Press ENTER over “Report Addresses” to enter up to three different email addresses that the Inventory Reports will be emailed to. Use the keypad to type in the addresses.

Once finished, press ESC. Any changes will be automatically saved.

Reporting Config  
Reporting Status  
Report Addresses  
Report Now

Reporting Config  
Sample Rate 5 m  
Report Rate 1 hr  
Web Reporting No

Reporting Status  
Next: 06/11 12:00PM  
Last: 06/10 12:00PM  
Net: Yes Pts: 5

Report Addresses  
demo@clean-logix.com  
demo@foodplant.com  
bob@foodplant.com

## READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

### Reporting (Continued)

To manually force an email report to be sent, go to the Reporting Menu and press ↓ to scroll down until “Report Now” appears.

Press ENTER over “Report Now” to send an email report to all of the email addresses setup in “Report Addresses.”

If the unit is connected to the internet, it will send a report containing the latest dispense logs (since the last email report) in a .csv file, and the raw data of the dispense logs in a .json file.

The report will include the date and time of the report, as well as the serial number of the unit that it was sent from. If the report is not received, check the spam filter on your email provider as well as the internet connection of the IVX-LITE.

Reporting Config  
Reporting Status  
Report Addresses  
Report Now

Processing Report

Report Complete!

## READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

### Troubleshooting: Admin Screen Errors

<b>Message</b>	Export Failed
<b>Cause</b>	A USB flash drive is not plugged into the USB port on the bottom of the unit.
<b>Solution</b>	Plug a USB flash drive into the unit so that it can export logs.

Export Failed!

<b>Message</b>	Export Empty
<b>Cause</b>	No new dispense logs have been created since the last time logs were exported.
<b>Solution</b>	Once new dispenses have been run, the unit will be able to successfully export "New Dispenses."

Export Empty!

<b>Message</b>	Reporting Disabled
<b>Cause</b>	A manual report was attempted, but the interval in "Report Timing" is set to "00."
<b>Solution</b>	Log into the Admin screen, then under "Reporting" select "Report Timing" and set the interval to something higher than "00." (See Page 22).

Reporting Disabled

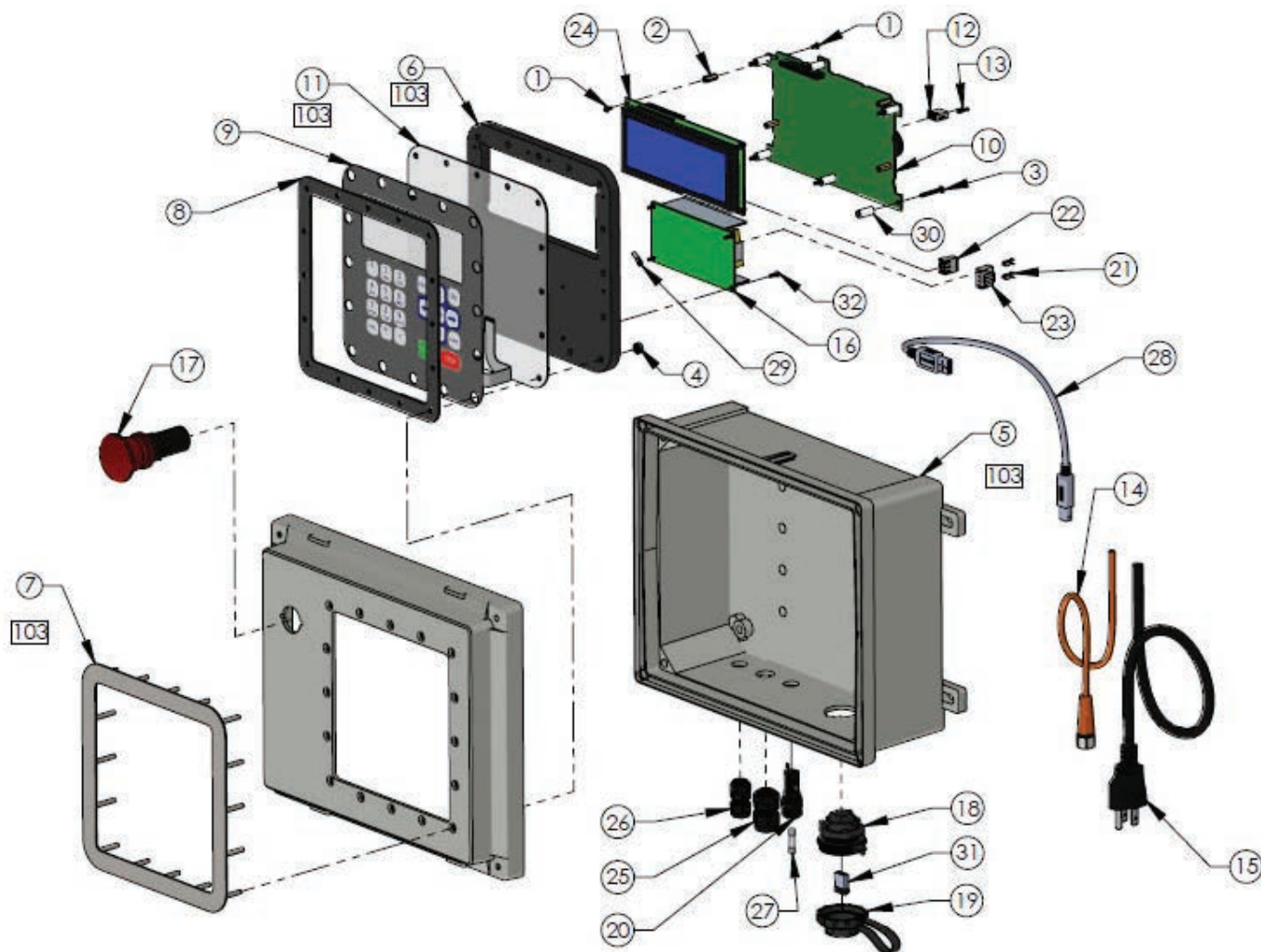
<b>Message</b>	Nothing to Report
<b>Cause</b>	A manual report was attempted, but there have not been any new dispenses since the last report.
<b>Solution</b>	Once new dispenses have been run, the unit will be able to successfully report.

Nothing to Report!

## READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

### Exploded Views/BOMs

Model IVX-LITE | Exploded View  
115VAC



## READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

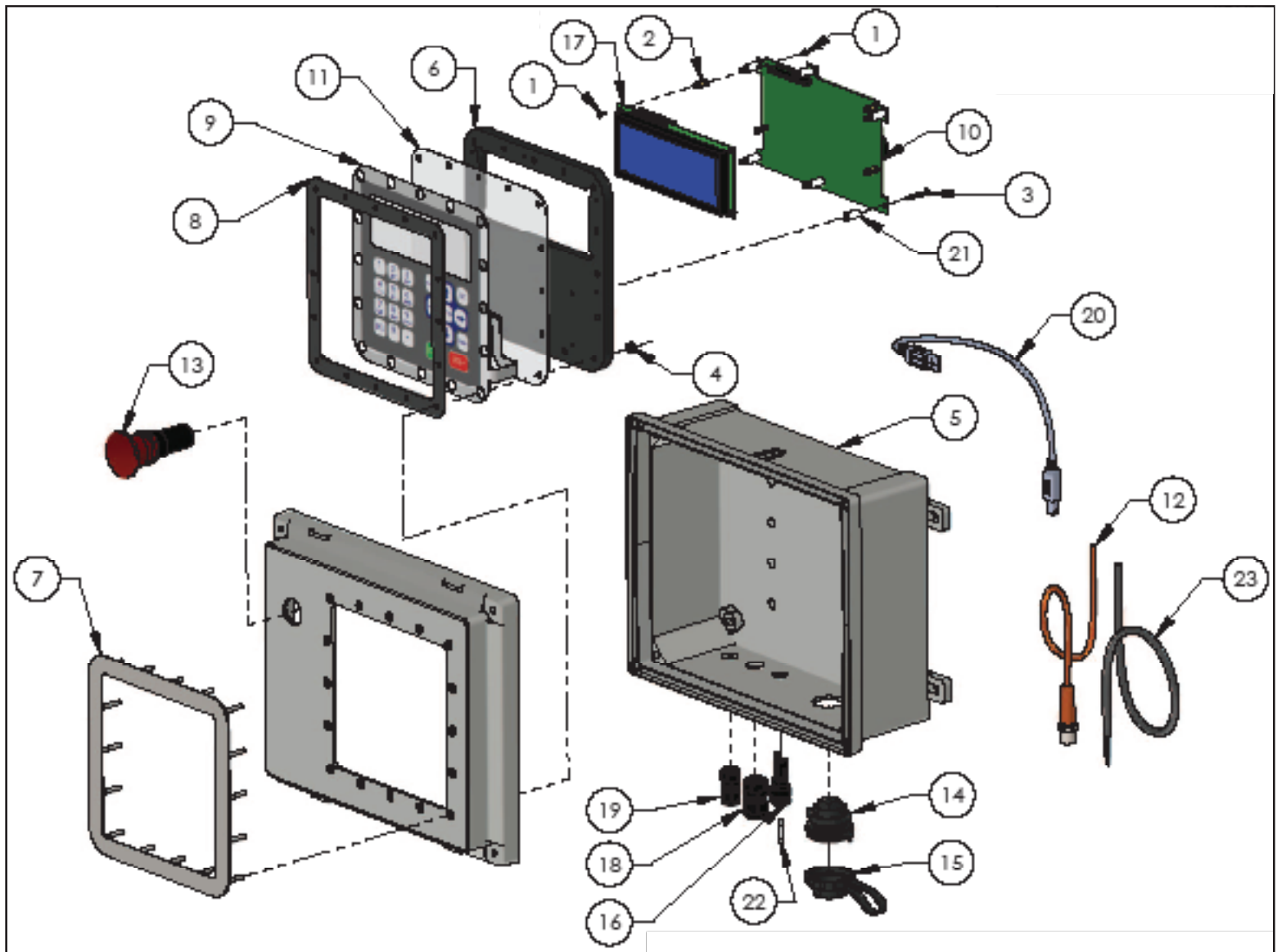
Model IVX-LITE | BOM  
115VAC

NO.	PART NUMBER	DESCRIPTION	QTY.
1	F1158	SCREW MACHINE M2.5 X 5 SS PHILLIPS PAN HD	8
2	F1159	STANDOFF M2.5 X 12 BRASS	4
3	F1160	SCREW MACHINE 4-40 X 7/8 ZN PHILLIPS PAN HD	6
4	F1163	NUT KEPS LOCK 6-32 ZN	16
5	M1499	CONTROLLER ENCLOSURE	1
6	M1500	MEMBRANE BACK PLATE	1
7	M1501	MEMBRANE BEZEL	1
8	M1503	GASKET 200 SERIES KEYPAD	1
9	M1511	MEMBRANE KEYPAD 200 SERIES	1
10	M1512	PCB 200 SERIES CONTROLLER	1
11	M1610	200 SERIES KEYPAD CARRIER	1
12	P1128	TERMINAL HOUSING 4-POS	1
13	P1130	TERMINAL CRIMP	4
14	P1282	CAN CABLE 5 Meter (16.48ft)	1
15	P1288	POWER CORD 18-3 SO 5-15P	1
16	P1428	POWER SUPPLY 24V 2.7 AMP 65 WATT	1
17	P1429	PUSH-PULL BUTTON RED 40MM	1
18	P1431	USB RECEPTACLE PANEL MOUNT	1
19	P1432	USB DUST CAP ASSY	1
20	P1433	FUSE HOLDER 250V 10A PANEL MOUNT	1
21	P1434	TERMINAL CRIMP VH/NV 18-22AWG JST	4
22	P1435	TERMINAL HOUSING VH 3-POS	1
23	P1436	TERMINAL HOUSING VH 4-POS	1
24	P1437	LED DISPLAY 4X20	1
25	P1438	CORD GRIP PG9 .105-.312	1
26	P1439	CORD GRIP PG7 .115-.250	1
27	P1441	FUSE 250VAC 2A 5X20	1
28	P1442	USB CABLE A MALE to B MALE 1 FOOT	1
29	P1464	TERMINAL, #4 RING, 18-22 AWG NON-INS	1
30	P1465	SPACER #4 X 1/4" X 9/16" NYLN	6
31	P1497	USB FLASH DRIVE 8GB LOW PROFILE	1
32	P1523	SCREW #4-24 X 5/16" HI-LO PHILLIPS PAN ZN	4

## READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

### Exploded Views/BOMs

Model IVX-LITE | Exploded View  
12VDC



## READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

Model IVX-LITE | BOM

12VDC

NO.	PART NUMBER	DESCRIPTION	QTY.
1	F1158	SCREW MACHINE M2.5 X 5.33 PHILLIPS PAN HD	8
2	F1159	STANDOFF M2.5 X 14 ALU	4
3	F1160	SCREW MACHINE 4-40 X 7/8 IN PHILLIPS PAN HD	8
4	F1163	NUT KEYS LOCK 6-32 IN	16
5	M1499	CONTROLLER ENCLOSURE	1
6	M1500	MEMBRANE BACK PLATE	1
7	M1501	MEMBRANE BEZEL	1
8	M1503	GASKET 200-SERIES KEYPAD	1
9	M1511	MEMBRANE KEYPAD 200 SERIES	1
10	M1512	PCB 200-SERIES CONTROLLER	1
11	M1610	200-SERIES KEYPAD CARRIER	1
12	P1199	CABLE M12 4-PIN AXIAL MALE-FEMALE 2m	1
13	P1429	PUSH-PULL BUTTON RED 40MM	1
14	P1431	USB RECEPTACLE PANEL MOUNT	1
15	P1432	USB DUST CAP ASSY	1
16	P1433	FUSE HOLDER 250V 10A PANEL MOUNT	1
17	P1437	LED DISPLAY 4020	1
18	P1438	CORD GRP PG7 .115-.312	1
19	P1439	CORD GRP PG7 .115-.250	1
20	P1442	USB CABLE A MALE to B MALE 1 FOOT	1
21	P1465	SPACER 3/4 X 1/4" X 9/16" NYLN	8
22	P1489	FUSE 250VAC 5A 5020	1
23	P1490	CABLE 2 CONDUCTOR 18 AWG PVC	1